

AMENDMENTS TO THE CLAIMS:

Kindly cancel claims 1, 3, 10, 14, 15, 23-24 and 26, without prejudice, amend claims 2, 4-6, 8-9, 11-13, 16-22 and 25, and add new claim 27, as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (cancelled)

Claim 2 (currently amended): The system as claimed in claim ~~[[1]]~~ 27, further comprising an initialization function associated with the viewer for directing the processing one or more control elements in a document object model of the extended presentation markup language defining the web application, the initialization function comprising instructions for:

traversing each node in a document object model and for searching and calling functions for nodes identified by the namespace associated with the user interface control elements;

generating the function name based on the user interface control identifier of control elements of the nodes identified by the namespace, the function name generated following a predetermined naming convention; and

calling the user interface control instructions associated with the control element through the generated function name associated with the control element, the namespace having names following a predetermined naming convention.

Claim 3 (cancelled)

Claim 4 (currently amended): The system as claimed in claim ~~[[1]]~~ 27, wherein the skin template is associated with the use interface control element by a reference attribute that comprises a reference to [[the]] a location of a skin template file comprising the collection of presentation markup language describing the user interface control element.

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Claim 5 (currently amended): The system as claimed in claim [[1]] 27, wherein the user interface control element is associated with an extensible markup language based element.

Claim 6 (currently amended): The system as claimed in claim 5, wherein the user interface control element is a parent of an extensible markup language based element.

Claim 7 (original): The system as claimed in claim 5, wherein the control element is a child of an extensible markup language based element.

Claim 8 (currently amended): The system as claimed in claim 2, further comprising:

a collection of control attributes for adding to ~~existing regular extensible markup language based elements in a document object model~~ the core attributes, the control attributes following the predetermined naming convention; and

a collection of control attribute instructions for performing actions associated with the collection of control attributes, each instruction associated with a control attribute.

Claim 9 (currently amended): The system as claimed in claim 8, wherein the initialization function contains instructions for traversing each node in the document object model and for searching and calling functions associated with the user interface control elements and the control attributes having names following the predetermined naming convention.

Claim 10 (cancelled)

Claim 11 (currently amended): The system as claimed in claim [[1]] 27, wherein the ~~common~~ core attributes comprise state attributes for specifying the identification of a <state> child element of the user interface control element.

Claim 12 (currently amended): The system as claimed in claim [[1]] 27, wherein the ~~common~~ core attributes comprise one or more of:

an identification attribute for referencing the control element;

a label attribute for associating text control;

an x attribute for specifying the x-coordinate of the left edge of the control element;
a y attribute for specifying the y-coordinate of the top edge of the control element;
a width attribute for specifies the width of the control element;
a height attribute for specifies the height of the control element;
a preserve aspect ratio attribute for preserving the aspect ratio of the control element

when either the width attribute or height attribute is known;

a labelX attribute for specifying the x-coordinate of the left edge of the label, relative to the 'y' attribute;

a labelY attribute for specifying the y-coordinate of the bottom edge of the label, relative to the 'x' attribute;

a disabled attribute for specifying whether the control element is disabled and cannot be used;

a state hover attribute for specifying the identification of a <state> child element of the control element, the state hover attribute used to override the appearance of a hover state as defined in a skin of the control element;

a state focus attribute for specifying the identification of a <state> child element of the control element, the state focus attribute used to override the appearance of a focus state as defined in a skin of the control element;

a state up attribute for specifying the identification of a <state> child element of the control element, the state up attribute used to override the appearance of an up state as defined in a skin of the control element;

a state down attribute for specifying the identification of a <state> child element of the control element, the state down attribute used to override the appearance of a down state as defined in a skin of the control element;

a state hit attribute for specifying the identification of a <state> child element of the control element, the state hit attribute used to override the appearance of a hit state as defined in a skin of the control element;

a state disabled up attribute for specifying the identification of a <state> child element of the control element, the state disabled up attribute used to override the appearance of a disabled up state as defined in the skin of the control element; and

a state disabled down attribute for specifying the identification of a <state> child element of the control element, the state disabled down attribute used to override the appearance of a disabled down state as defined in a skin of the control element.

Claim 13 (currently amended): The system as claimed in claim 12, wherein the set of control elements comprises one or more of:

a dsvg:button control element for defining a control that is clicked to trigger an action, the dsvg:button control element comprising:

~~a namespace following the predetermined naming convention;~~

~~the common-control attributes[[:]]~~

~~other attributes comprising including:~~

a toggle attribute for specifying whether the button is a toggle or a sticky button;

a group attribute for specifying the name of a group to which the button control element belongs; and

a checked attribute for specifying whether the button control element is down/checked or up/unchecked;

~~a skin template reference attribute for specifying the location of a control element skin template, the skin template reference settable to a uniform resource index; and~~

~~_____ a customizable skin template comprising scalable vector graphics markup
contained as children of a container element;~~

a dsvg:comboBox control element for defining a control that is clicked to trigger an
action, the dsvg:comboBox control element comprising[[:]]

a namespace following the predetermined naming convention;

the common control attributes[[:]]

other attributes comprising including:

a dropdown attribute for specifying whether the comboBox control
element has a dropdown list;

an editable attribute for specifying whether the comboBox control
element is editable;

a value attribute for specifying the value of the label attribute of
currently selected item;

a name attribute for specifying the value of a name attribute of a
currently selected item; and

a selected identification attribute for specifying the value of the
identification attribute of a currently selected item;

~~a skin template reference attribute for specifying the location of a control
element skin template, the skin template reference settable to a uniform resource index; and~~

~~_____ a customizable skin template comprising scalable vector graphics markup
contained as children of a container element;~~

a dsvg:listBox control element for defining a control that is clicked to trigger an action,
the dsvg:listBox control element comprising:

~~_____ a namespace following the predetermined naming convention;~~

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~~the common control~~ attributes[[:]]

~~other attributes comprising~~ including:

a multi select attribute for specifying whether more than one item can be selected;

an editable attribute for specifying whether the listBox control element is editable;

a value attribute for specifying the value of the label attribute of currently selected item;

a name attribute for specifying the value of a name attribute of a currently selected item; and

a selected identification attribute for specifying the value of the identification attribute of a currently selected item;

~~a skin template reference attribute for specifying the location of a control element skin template, the skin template reference settable to a uniform resource index; and~~

~~a customizable skin template comprising scalable vector graphics markup contained as children of a container element;~~

a dsvg:listView control element for defining a control that is clicked to trigger an action, the dsvg:listView control element comprising:

~~a namespace following the predetermined naming convention;~~

~~the common control~~ attributes[[:]]

~~other attributes comprising~~ including:

a multi select attribute for specifying whether more than one item can be selected;

an editable attribute for specifying whether the comboBox control element is editable;

a display attribute for specifying a semicolon-delimited list of the names of the attributes in all of the <item> children of a control element;

an anything attribute for specifying an attribute name in which to store data; and

a selected identification attribute for specifying the value of the identification attribute of a currently selected item;

~~a skin template reference attribute for specifying the location of a control element skin template, the skin template reference settable to a uniform resource index; and~~

~~a customizable skin template comprising scalable vector graphics markup contained as children of a container element;~~

a dsvg:contextMenu control element for defining a control that is clicked to trigger an action, the dsvg:contextMenu control element comprising:

~~a namespace following the predetermined naming convention;~~

~~the common control attributes[[:]]~~

~~other attributes comprising including:~~

an event source attribute for specifying the identification of an element that triggered the contextMenu control element to appear;

a value attribute for specifying the value of the label attribute of currently selected item;

a name attribute for specifying the value of a name attribute of a currently selected item; and

a selected identification attribute for specifying the value of the identification attribute of a currently selected item;

~~a skin template reference attribute for specifying the location of a control element skin template, the skin template reference settable to a uniform resource index; and~~

~~a customizable skin template comprising scalable vector graphics markup contained as children of a container element;~~

a dsvg:item control element for defining a control that is clicked to trigger an action, the dsvg:item control element comprising:

~~_____ a namespace following the predetermined naming convention;~~

~~_____ the common control attributes[[:]]~~

~~_____ other attributes comprising including:~~

~~an access key attribute for specifying a shortcut key which, when pressed, selects this item; and~~

~~an anything attribute for specifying an attribute name in which to store data;~~

~~a skin template reference attribute for specifying the location of a control element skin template, the skin template reference settable to a uniform resource index; and~~

~~a customizable skin template comprising scalable vector graphics markup contained as children of a container element;~~

a dsvg:textbox control element for defining a control that is clicked to trigger an action, the dsvg:textbox control element comprising:

~~_____ a namespace following the predetermined naming convention;~~

~~the common control attributes[[:]]~~

~~other attributes comprising including:~~

a value attribute for specifies default text within the textbox control element;

a num lines attribute for specifying a number of lines allowed in the textbox control element;

a max length attribute for specifying a maximum number of characters allowed in the textbox control element;

a wrap attribute for specifying whether to auto-wrap text;

a read only attribute for specifying if the textbox control element is non-editable;

a secret attribute for specifies whether text is secret;

a data type attribute for specifying a type of data that allowed to be entered;

a mask attribute for specifies a pattern that allows extra characters to be inserted into data as it is entered and for only allowing specific characters in specific locations; and

a case attribute for specifying the case of data entered into the textbox control element;

~~a skin template reference attribute for specifying the location of a control element skin template, the skin template reference settable to a uniform resource index; and~~

~~a customizable skin template comprising scalable vector graphics markup contained as children of a container element;~~

a dsvg:slider control element for defining a control that is clicked to trigger an action, the dsvg:slider control element comprising:

~~a namespace following the predetermined naming convention;~~

~~the common control~~ attributes;

~~other attributes comprising~~ including:

a min attribute for specifying a minimum value of the slider control element;

a max attribute for specifying a maximum value of the slider control element;

a min position attribute for specifies a minimum allowed value of a thumb;

a max position attribute for specifies a maximum allowed value of a thumb;

a value attribute for specifying an initial value of the slider control element;

an increment attribute for specifying allowed values that the slider control element can create;

a page increment attribute for specifying an amount that a thumb moves;

an orientation attribute for specifying a rotation angle of the slider control attribute;

a ticks major attribute for specifying an interval at which major tick marks are displayed; and

a ticks minor attribute for specifying an interval at which minor tick marks are displayed;

~~a skin template reference attribute for specifying the location of a control~~

~~element skin template, the skin template reference settable to a uniform resource index; and~~

~~a customizable skin template comprising scalable vector graphics markup
contained as children of a container element;~~

a dsvg:scrollbar control element for defining a control that is clicked to trigger an
action, the dsvg:scrollbar control element comprising:

~~_____ a namespace following the predetermined naming convention;~~

~~the common control attributes[[:]]~~

~~other attributes comprising a bars attribute for specifies the appearance of a
horizontal scrollbar or a vertical scrollbar;~~

~~a skin template reference attribute for specifying the location of a control
element skin template, the skin template reference settable to a uniform resource index; and~~

~~a customizable skin template comprising scalable vector graphics markup
contained as children of a container element;~~

a dsvg:spin control element for defining a control that is clicked to trigger an action, the
dsvg:spin control element comprising[[:]]

~~_____ a namespace following the predetermined naming convention;~~

~~_____ the common control attributes;~~

~~_____ other attributes comprising including:~~

~~a min attribute for specifying a minimum value of the spin control
element;~~

~~a max attribute for specifying a maximum value of the spin control
element;~~

~~a value attribute for specifying an initial value of the spin control
element; and~~

an increment attribute for specifying allowed values that the spin control element can create;

~~a skin template reference attribute for specifying the location of a control element skin template, the skin template reference settable to a uniform resource index; and~~
~~a customizable skin template comprising scalable vector graphics markup contained as children of a container element.~~

Claims 14 and 15 (cancelled)

Claim 16 (currently amended): A method of controlling user interface features of a web application, the method comprising the steps of:

searching for describing the web application using an extended presentation markup language, the web application description including a designated control definition comprising a named element identifying a user interface control element of the web application;

searching, in a document object model[[]; and[]]

calling a script of the web application, for user interface controls of the web application designated by a namespace associated with the designated user interface control elements of the extended presentation markup language;

generating a function name associated with the user interface controls based on the namespace and a user interface control identifier element; and

calling control instructions associated with the user interface controls through the generated function name, the control instructions defining the behaviour of the user interface control element.

Claim 17 (currently amended): The method as claimed in claim 16, wherein the step of searching includes the steps of:

traversing each node in the document object model; and

determining whether ~~an element~~ the node has a name which ~~follows~~ matches a designated naming convention.

Claim 18 (currently amended): The method as claimed in claim 16, wherein the step of calling a script includes the steps of:

~~_____ dynamically generating a function name associated with the designated element;~~
passing an object associated with the designated control element as a parameter of a ~~function stored in memory having the generated function name;~~
retrieving the attributes of the object; and
performing ~~[[the]]~~ a function stored in memory having the generated function name.

Claim 19 (currently amended): The method as claimed in claim 18, wherein the step of ~~dynamically generating~~ function name includes the steps of:

determining if the name of the designated element contains a designated prefix;
generating ~~[[the]]~~ a function name comprising of the name of the designated element;
assigning ~~[[the]]~~ an object associated with the designated element as the parameter of the function; and

assigning ~~predetermined~~ the control instructions of the designated element as steps for the function to perform.

Claim 20 (currently amended): The method as claimed in claim 16, further comprising the steps of:

searching for a ~~designated~~ control attribute ~~[[in]]~~ of an user interface control element in ~~[[a]]~~ the document object model; and

calling a ~~script~~ control attribute instructions associated with the ~~designated~~ control attribute.

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Claim 21 (currently amended): The method as claimed in claim 20, wherein the step of searching for a ~~designated~~ the control attribute comprises the steps of:

searching attributes of ~~[[an]]~~ the user interface control element in ~~[[a]]~~ the document object model; and

determining whether ~~an element~~ the attribute has a name which follows a designated naming convention.

Claim 22 (currently amended): The method as claimed in claim ~~[[21]]~~ 11, wherein the step of calling a ~~script~~ the control attribute instructions includes the steps of:

determining if the name of the ~~designated~~ control attribute ~~contains~~ includes a designated prefix;

generating a function name comprising ~~[[of]]~~ the name of the ~~designated~~ control attribute;

assigning an object associated with the ~~designated~~ control attribute as the parameter of the function name ; and

assigning ~~predetermined~~ the control attribute instructions of the designated attribute as steps for a function having the function name to perform.

Claims 23 and 24 (cancelled)

Claim 25 (currently amended): ~~[[A]]~~ The method of ~~controlling user interface features of a web application, the method~~ as claimed in claim 16, further comprising the steps of:

adding a behavior element as a child of a user interface control element;

receiving an event which is equal to an event attribute setting in the behavior element;

and

calling a ~~script~~ behaviour element instructions associated with the behavior element.

Claim 26 (cancelled)

Claim 27 (new): A system for controlling user interface features of a web application, the system comprising:

a collection of user interface control elements including a user interface control element identified in the web application, the web application described in an extended presentation markup language, the web application description including a user interface control comprising a name element identifying the user interface control element of the web application, each of the user interface control elements of the collection comprising:

an associated namespace for identifying the user interface control element as part of the extended presentation markup language;

a user interface control identifier for associating the user interface control element with the user interface control of the web application; and

a set of core attributes common to all of the user interface control elements;

a collection of skin templates, each of the skin templates associated with one of the user interface control elements of the collection of control elements through one of the core attributes of the user interface control elements, each of the skin templates comprising a collection of presentation markup language describing how to display the user interface control element associated with the each of the skin templates; and

a collection of user interface control instructions implemented in a viewer for the extended presentation markup language, each of the control instructions associated with one of the user interface control elements through a function name, the function name based on the namespace and the user interface control identifier of the user interface control element associated with the web application's user interface control element, the user interface control instructions defining the behavior of the user interface control element.